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UNITED STATES DISTRICT COURT DISTRICT OF NEW JERSEY

JOHN R. AFINOWICZ, Individually and on behalf of all others similarly situated,

Plaintiff,

v.

LOGICBIO THERAPEUTICS, INC., FREDERIC CHEREAU, and MATTHIAS B. JAFFÉ,

Defendants.

Case No:

CLASS ACTION COMPLAINT FOR VIOLATIONS OF THE FEDERAL SECURITIES LAWS

JURY TRIAL DEMANDED

Plaintiff John R. Afinowicz ("Plaintiff"), individually and on behalf of all other persons similarly situated, by Plaintiff's undersigned attorneys, for Plaintiff's complaint against Defendants (defined below), alleges the following based upon personal knowledge as to Plaintiff and Plaintiff's own acts, and information and belief as to all other matters, based upon, *inter alia*, the investigation conducted by and through his attorneys, which included, among

other things, a review of the Defendants' public documents, conference calls and announcements made by Defendants, public filings, wire and press releases published by and regarding LogicBio Therapeutics, Inc. ("LogicBio" or the "Company"), and information readily obtainable on the Internet. Plaintiff believes that substantial evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

NATURE OF THE ACTION

1. This is a class action on behalf of persons or entities who purchased or otherwise acquired publicly traded LogicBio securities between December 3, 2018 and February 10, 2020, inclusive (the "Class Period"). Plaintiff seeks to recover compensable damages caused by Defendants' violations of the federal securities laws under the Securities Exchange Act of 1934 (the "Exchange Act").

JURISDICTION AND VENUE

- 2. The claims asserted herein arise under and pursuant to Sections 10(b) and 20(a) of the Exchange Act (15 U.S.C. §§ 78j(b) and 78t(a)) and Rule 10b-5 promulgated thereunder by the SEC (17 C.F.R. § 240.10b-5).
- 3. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. § 1331, and Section 27 of the Exchange Act (15 U.S.C. §78aa).

- 4. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(b) and Section 27 of the Exchange Act (15 U.S.C. § 78aa(c)) as the alleged misstatements entered and the subsequent damages took place in this judicial district.
- 5. In connection with the acts, conduct and other wrongs alleged in this complaint, Defendants (defined below), directly or indirectly, used the means and instrumentalities of interstate commerce, including but not limited to, the United States mails, interstate telephone communications and the facilities of the national securities exchange.

PARTIES

- 6. Plaintiff John R. Afinowicz, as set forth in the accompanying certification, incorporated by reference herein, purchased LogicBio securities during the Class Period and was economically damaged thereby.
- 7. Defendant LogicBio purports to be a genome editing company, focused on developing medicines to treat rare diseases in patients with unmet medical need using GeneRide technology platform. The Company's lead product candidate is LB-001 for the treatment of Methylmalonic Acidemia ("MMA"), a life-threatening disease that presents at birth.

- 8. LogicBio is incorporated in Delaware and its head office is located at 99 Erie Street, Cambridge, MA 02139. LogicBio's securities trades on NASDAQ under the ticker symbol "LOGC."
- 9. Defendant Frederic Chereau ("Chereau") served as the Company's Executive Officer ("CEO"), President, and as a Director during the Class Period.
- 10. Defendant Matthias B. Jaffé ("Jaffé") served as the Company's Chief Financial Officer and Treasurer during the Class Period.
- 11. Defendants Chereau and Jaffé are collectively referred to herein as the "Individual Defendants."
 - 12. Each of the Individual Defendants:
 - (a) directly participated in the management of the Company;
 - (b) was directly involved in the day-to-day operations of the Company at the highest levels;
 - (c) was privy to confidential proprietary information concerning the Company and its business and operations;
 - (d) was directly or indirectly involved in drafting, producing, reviewing and/or disseminating the false and misleading statements and information alleged herein;
 - (e) was directly or indirectly involved in the oversight or implementation of the Company's internal controls;

- (f) was aware of or recklessly disregarded the fact that the false and misleading statements were being issued concerning the Company; and/or
- (g) approved or ratified these statements in violation of the federal securities laws.
- 13. LogicBio is liable for the acts of the Individual Defendants and its employees under the doctrine of *respondeat superior* and common law principles of agency because all of the wrongful acts complained of herein were carried out within the scope of their employment.
- 14. The scienter of the Individual Defendants and other employees and agents of the Company is similarly imputed to LogicBio under *respondeat* superior and agency principles.
- 15. Defendant LogicBio and the Individual Defendants are collectively referred to herein as "Defendants."

SUBSTANTIVE ALLEGATIONS Materially False and Misleading Statements Issued During the Class Period

16. On December 3, 2018, LogicBio issued a press release announcing its third quarter 2018 results. The press release stated the following, in pertinent part, about LB-001 and its timeline:

Lead Product Candidate LB-001 in Development for MMA: The Company is initially examining the potential of its GeneRide platform

in MMA, a life-threatening disease that typically presents at birth. LogicBio has demonstrated preclinical proof-of-concept of GeneRide in multiple animal models of the disease, improving survival and reversing disease pathology. The Company expects to file an IND for LB-001 in late-2019 and initiate a Phase 1/2 trial shortly thereafter.

(Emphasis added.)

17. On April 1, 2019, LogicBio issued a press release announcing its fourth quarter and full year 2018 financial results. The press release highlighted LogicBio's progress with LB-001 and their timeline, stating the following in relevant part:

"In 2018 we made steady progress advancing GeneRideTM, our proprietary promoterless, nuclease-free genome editing platform," said Fred Chereau, CEO of LogicBio. "This year, we intend to file an Investigational New Drug (IND) application for our lead candidate, LB-001, in methylmalonic acidemia..."

* * *

Recent Highlights and Outlook

Significant Expansion of Leadership and Lab Space to Support Advancement of Pipeline: LogicBio significantly expanded its research and technology development groups as well as its leadership team as the Company continues to advance its lead product candidate to an expected IND filing by the end of 2019.

* * *

Developing Genome Editing Platform GeneRide: The Company continues to develop GeneRide, its proprietary promoterless, nuclease-free genome editing technology. GeneRide harnesses homologous recombination to precisely integrate corrective genes into a patient's genome and leverages endogenous promoters to drive gene expression, providing a stable therapeutic effect. LogicBio is initially targeting rare liver disorders in pediatric patients where it is critical to

provide treatment early in a patient's life before irreversible disease pathology can occur. The Company continues to use a modular approach to build its pipeline, leveraging the same homology arms, site of integration and delivery vector for each candidate for a given tissue type. Together with its collaborators, LogicBio has demonstrated proof-of-concept for compounds utilizing GeneRide in animal models of MMA, hemophilia B, alpha-1-antitrypsin deficiency (A1ATD), and Crigler-Najjar syndrome. The Company is initially pursuing MMA and plans to nominate a second indication by the end of 2019.

Lead Product Candidate LB-001 in Development for MMA: The Company is initially examining the potential of its GeneRide platform in MMA, a life-threatening disease that typically presents at birth for which there are no approved therapies. LogicBio has demonstrated preclinical proof-of-concept of GeneRide in multiple animal models of the disease, improving survival and reversing disease pathology. In preclinical MMA models, LogicBio has shown that cells into which GeneRide has inserted a transgene demonstrate a selective survival advantage over cells not expressing the transgene. The Company expects to file an IND for LB-001 in the fourth quarter of 2019 and initiate a Phase 1/2 trial in 2020.

(Emphasis added.)

- 18. Also on April 1, 2019, LogicBio filed with the SEC its 2018 Annual Report on Form 10-K for the year ended December 31, 2018 (the "2018 Annual Report"). Attached to the 2018 Annual Report were certifications pursuant to the Sarbanes-Oxley Act of 2002 ("SOX") signed by Defendants Chereau and Jaffé attesting to the accuracy of financial reporting, the disclosure of any material changes to the Company's internal control over financial reporting and the disclosure of all fraud.
 - 19. The 2018 Annual Report stated the following, in pertinent part,

regarding LB-001 and its timeline:

Advance LB-001 through successful clinical trials and ultimately into commercialization. We chose a specific organic acidemia, MMA, as our initial indication to enter proof-of-concept trials in humans due to the high unmet medical need and the absence of therapeutic treatments for this disease. We plan to advance our lead product candidate, LB-001 to an IND filing by the end of 2019 and into a Phase 1/2 clinical trial in pediatric MMA patients in 2020. Our goal is to develop LB-001 ourselves and, if approved, to retain global commercialization rights and commercialize through a small, targeted sales organization.

* * *

LB-001 for the Treatment of Methylmalonic Acidemia (MMA)

We are developing our product candidate, LB-001, for the treatment of MMA. LB-001 contains a transgene coding for *MUT*, the most common gene deficiency in patients with MMA. LB-001 is designed to target liver cells and insert the *MUT* transgene into the albumin locus. We plan to advance LB-001 to an IND filing by the end of 2019 and into a Phase 1/2 clinical trial in pediatric MMA patients in 2020.

20. On May 14, 2019, LogicBio issued a press release announcing its first quarter 2019 financial results and providing business updates. Defendant Chereau touted LB-001 and reaffirmed the company's timeline, stating the following in pertinent part:

During the quarter, we continued to make progress advancing GeneRideTM, our proprietary promoterless, nuclease-free genome editing platform, and built our team with several experienced hires . . . In April, our lead candidate, LB-001, received orphan drug designation from the U.S. Food and Drug Administration (FDA) for the treatment of methylmalonic acidemia (MMA), and we are continuing to work towards an Investigational New Drug (IND) filing for this program in late 2019.

Recent Highlights and Outlook

Orphan Designation for Lead Product Candidate LB-001: The Company is initially examining the potential of its GeneRide platform in MMA, a life-threatening rare disease characterized by the toxic buildup of metabolites starting in early childhood for which there are no approved therapies. . . . LogicBio expects to file an IND for LB-001 in the fourth quarter of 2019 and initiate a Phase 1/2 trial in 2020.

(Emphasis added.)

21. On November 12, 2019, LogicBio issued a press release entitled "LogicBio Reports Third Quarter 2019 Financial Results and Provides Business Updates" which reaffirmed its LB-001 timeline and further stated the following, in relevant part:

LB-001 leverages LogicBio's proprietary, promoterless, nuclease-free genome editing technology, GeneRideTM, and has previously received both orphan drug and rare pediatric disease designations from the FDA.

LogicBio intends to disclose additional details regarding the planned Phase 1/2 trial, including trial size, endpoints, and timelines, once the FDA accepts the IND. LogicBio plans to initiate a Phase 1/2 trial in pediatric MMA patients in the first half of 2020, with preliminary data expected in the second half of 2020.

"We founded LogicBio with the mission of bringing genetic medicines to children with rare diseases. Both the IND submission and the nomination of our second indication represent significant steps in advancing our goal," said Fred Chereau, CEO of LogicBio. "MMA and CN are devastating early onset diseases with no approved pharmacological therapies, and we are committed to developing novel medicines based on our GeneRide platform for pediatric patients. We look forward to a transformational year for LogicBio as we work to

advance our programs, validate our platform, and expand our pipeline."

(Emphasis added.)

- 22. On January 10, 2020 LogicBio issued a press release announcing the submission of its Investigational New Drug ("IND") for LB-001 for MMA to the U.S. Food and Drug Administration ("FDA"). In the press release, LogicBio reaffirmed their timeline. The press release also quoted Defendant Chereau stating, "Both the IND submission and the nomination of our second indication represent significant steps in advancing our goal . . . We look forward to a transformational year for LogicBio as we work to advance our programs, validate our platform, and expand our pipeline."
- 23. On January 12, 2020, LogicBio gave a corporate presentation with a slideshow (the "Corporate Presentation"). The Corporate Presentation touted the path and timeline of LB-001. The Corporate Presentation noted that the GeneRide MMA (Program 1) was "Filed IND for LB-001 in pediatric MMA, Ph1/2 initiation planned H1'2020" with a "LB-001 goal: 'Molecular liver transplant'".
- 24. The Corporate Presentation touted the positive effects of the LB-001 treatment for MMA in mice. The Corporate Presentation also highlighted the Company's recent and future path, again, reaffirming its timeline for LB-001:

Recent achievements

Multiple PoCs in relevant animal models

First to address MMA with a single treatment

Next generation vectors CMRI collaboration

Filed LB-001 IND

Takeda partnership & nomination of Crigler Najjar as 2nd indication

* * *

Upcoming catalysts

1H 2020: Initiation of LB 001 Ph. 1/2 clinical trial

2H 2020: Prelim. data from Ph. 1/2 clinical trial

(Emphasis added.)

25. The statements contained in ¶16-24 were materially false and/or

misleading because they misrepresented and failed to disclose the following

adverse facts pertaining to the Company's business, operations and prospects,

which were known to Defendants or recklessly disregarded by them. Specifically,

Defendants made false and/or misleading statements and/or failed to disclose that:

(1) LogicBio's behind-schedule and rushed IND submission of LB-001 did not

answer certain pertinent clinical and nonclinical questions; (2) as a result, the FDA

was likely to hold or deny the IND submission of LB-001 for treatment of MMA;

and (3) as a result, Defendants' statements about its business, operations, and

prospects, were materially false and misleading and/or lacked a reasonable basis at

all relevant times.

THE TRUTH EMERGES

26. On February 10, 2020, LogicBio issued a press release which

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announced:

... the U.S. Food and Drug Administration (FDA) has placed a clinical hold on the Investigational New Drug (IND) submission for LB-001 for the treatment of methylmalonic acidemia (MMA) pending the resolution of certain clinical and nonclinical questions. The Company submitted the IND in January 2020 to support the initiation of a Phase 1/2 clinical trial in patients with MMA. LogicBio expects that the FDA questions will be provided in writing within 30 days. LogicBio plans to work closely with the FDA to resolve these questions as quickly as possible.

(Emphasis added.)

- 27. On this news, shares of LogicBio fell \$3.34 per share, or almost 32%, to close at \$7.11 per share on February 11, 2020, on unusually high trading volume, damaging investors.
- 28. As a result of Defendants' wrongful acts and omissions, and the precipitous decline in the market value of the Company's common shares, Plaintiff and other Class members have suffered significant losses and damages.

PLAINTIFF'S CLASS ACTION ALLEGATIONS

29. Plaintiff brings this action as a class action pursuant to Federal Rule of Civil Procedure 23(a) and (b)(3) on behalf of a class consisting of all persons other than defendants who acquired LogicBio securities publicly traded on NASDAQ during the Class Period, and who were damaged thereby (the "Class"). Excluded from the Class are Defendants, the officers and directors of LogicBio, members of the Individual Defendants' immediate families and their legal

representatives, heirs, successors or assigns and any entity in which Defendants have or had a controlling interest.

- 30. The members of the Class are so numerous that joinder of all members is impracticable. Throughout the Class Period, LogicBio securities were actively traded on NASDAQ. While the exact number of Class members is unknown to Plaintiff at this time and can be ascertained only through appropriate discovery, Plaintiff believes that there are hundreds, if not thousands of members in the proposed Class.
- 31. Plaintiff's claims are typical of the claims of the members of the Class as all members of the Class are similarly affected by defendants' wrongful conduct in violation of federal law that is complained of herein.
- 32. Plaintiff will fairly and adequately protect the interests of the members of the Class and has retained counsel competent and experienced in class and securities litigation. Plaintiff has no interests antagonistic to or in conflict with those of the Class.
- 33. Common questions of law and fact exist as to all members of the Class and predominate over any questions solely affecting individual members of the Class. Among the questions of law and fact common to the Class are:
 - whether the Exchange Act was violated by Defendants' acts as alleged herein;

- whether statements made by Defendants to the investing public during the Class Period misrepresented material facts about the business and financial condition of LogicBio;
- whether Defendants' public statements to the investing public during
 the Class Period omitted material facts necessary to make the
 statements made, in light of the circumstances under which they were
 made, not misleading;
- whether the Defendants caused LogicBio to issue false and misleading filings during the Class Period;
- whether Defendants acted knowingly or recklessly in issuing false filings;
- whether the prices of LogicBio securities during the Class Period were artificially inflated because of the Defendants' conduct complained of herein; and
- whether the members of the Class have sustained damages and, if so, what is the proper measure of damages.
- 34. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Furthermore, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it

impossible for members of the Class to individually redress the wrongs done to them. There will be no difficulty in the management of this action as a class action.

- 35. Plaintiff will rely, in part, upon the presumption of reliance established by the fraud-on-the-market doctrine in that:
 - LogicBio shares met the requirements for listing, and were listed and actively traded on NASDAQ, an efficient market;
 - As a public issuer, LogicBio filed periodic public reports;
 - LogicBio regularly communicated with public investors via established market communication mechanisms, including through the regular dissemination of press releases via major newswire services and through other wide-ranging public disclosures, such as communications with the financial press and other similar reporting services;
 - LogicBio's securities were liquid and traded with moderate to heavy volume during the Class Period; and
 - LogicBio was followed by a number of securities analysts employed by major brokerage firms who wrote reports that were widely distributed and publicly available.

- 36. Based on the foregoing, the market for LogicBio securities promptly digested current information regarding LogicBio from all publicly available sources and reflected such information in the prices of the shares, and Plaintiff and the members of the Class are entitled to a presumption of reliance upon the integrity of the market.
- 37. Alternatively, Plaintiff and the members of the Class are entitled to the presumption of reliance established by the Supreme Court in *Affiliated Ute Citizens of the State of Utah v. United States*, 406 U.S. 128 (1972), as Defendants omitted material information in their Class Period statements in violation of a duty to disclose such information as detailed above.

COUNT I For Violations of Section 10(b) And Rule 10b-5 Promulgated Thereunder Against All Defendants

- 38. Plaintiff repeats and realleges each and every allegation contained above as if fully set forth herein.
- 39. This Count is asserted against Defendants is based upon Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and Rule 10b-5 promulgated thereunder by the SEC.
- 40. During the Class Period, Defendants, individually and in concert, directly or indirectly, disseminated or approved the false statements specified above, which they knew or deliberately disregarded were misleading in that they contained misrepresentations and failed to disclose material facts necessary in

order to make the statements made, in light of the circumstances under which they were made, not misleading.

- 41. Defendants violated §10(b) of the 1934 Act and Rule 10b-5 in that they:
 - employed devices, schemes and artifices to defraud;
 - made untrue statements of material facts or omitted to state
 material facts necessary in order to make the statements made,
 in light of the circumstances under which they were made, not
 misleading; or
 - engaged in acts, practices and a course of business that operated as a fraud or deceit upon plaintiff and others similarly situated in connection with their purchases of LogicBio securities during the Class Period.
- 42. Defendants acted with scienter in that they knew that the public documents and statements issued or disseminated in the name of LogicBio Education were materially false and misleading; knew that such statements or documents would be issued or disseminated to the investing public; and knowingly and substantially participated, or acquiesced in the issuance or dissemination of such statements or documents as primary violations of the securities laws. These defendants by virtue of their receipt of information

reflecting the true facts of LogicBio, their control over, and/or receipt and/or modification of LogicBio's allegedly materially misleading statements, and/or their associations with the Company which made them privy to confidential proprietary information concerning LogicBio, participated in the fraudulent scheme alleged herein.

- 43. Individual Defendants, who are the senior officers and/or directors of the Company, had actual knowledge of the material omissions and/or the falsity of the material statements set forth above, and intended to deceive Plaintiff and the other members of the Class, or, in the alternative, acted with reckless disregard for the truth when they failed to ascertain and disclose the true facts in the statements made by them or other LogicBio personnel to members of the investing public, including Plaintiff and the Class.
- 44. As a result of the foregoing, the market price of LogicBio securities was artificially inflated during the Class Period. In ignorance of the falsity of Defendants' statements, Plaintiff and the other members of the Class relied on the statements described above and/or the integrity of the market price of LogicBio securities during the Class Period in purchasing LogicBio securities at prices that were artificially inflated as a result of Defendants' false and misleading statements.

- 45. Had Plaintiff and the other members of the Class been aware that the market price of LogicBio securities had been artificially and falsely inflated by Defendants' misleading statements and by the material adverse information which Defendants did not disclose, they would not have purchased LogicBio securities at the artificially inflated prices that they did, or at all.
- 46. As a result of the wrongful conduct alleged herein, Plaintiff and other members of the Class have suffered damages in an amount to be established at trial.
- 47. By reason of the foregoing, Defendants have violated Section 10(b) of the 1934 Act and Rule 10b-5 promulgated thereunder and are liable to the plaintiff and the other members of the Class for substantial damages which they suffered in connection with their purchase of LogicBio securities during the Class Period.

COUNT II

Violations of Section 20(a) of the Exchange Act Against the Individual Defendants

- 48. Plaintiff repeats and realleges each and every allegation contained in the foregoing paragraphs as if fully set forth herein.
- 49. During the Class Period, the Individual Defendants participated in the operation and management of LogicBio, and conducted and participated, directly and indirectly, in the conduct of LogicBio's business affairs. Because of their

senior positions, they knew the adverse non-public information about LogicBio's misstatement of revenue and profit and false financial statements.

- 50. As officers and/or directors of a publicly owned company, the Individual Defendants had a duty to disseminate accurate and truthful information with respect to LogicBio's financial condition and results of operations, and to correct promptly any public statements issued by LogicBio which had become materially false or misleading.
- Because of their positions of control and authority as senior officers, the Individual Defendants were able to, and did, control the contents of the various reports, press releases and public filings which LogicBio disseminated in the marketplace during the Class Period concerning LogicBio's results of operations. Throughout the Class Period, the Individual Defendants exercised their power and authority to cause LogicBio to engage in the wrongful acts complained of herein. The Individual Defendants therefore, were "controlling persons" of LogicBio within the meaning of Section 20(a) of the Exchange Act. In this capacity, they participated in the unlawful conduct alleged which artificially inflated the market price of LogicBio securities.
- 52. By reason of the above conduct, the Individual Defendants are liable pursuant to Section 20(a) of the Exchange Act for the violations committed by LogicBio.

PRAYER FOR RELIEF

WHEREFORE, plaintiff, on behalf of himself and the Class, prays for

judgment and relief as follows:

(a) declaring this action to be a proper class action, designating plaintiff

as Lead Plaintiff and certifying plaintiff as a class representative under Rule 23 of

the Federal Rules of Civil Procedure and designating plaintiff's counsel as Lead

Counsel;

(b) awarding damages in favor of plaintiff and the other Class members

against all defendants, jointly and severally, together with interest thereon;

(c) awarding plaintiff and the Class reasonable costs and expenses

incurred in this action, including counsel fees and expert fees; and

(d) awarding plaintiff and other members of the Class such other and

further relief as the Court may deem just and proper.

JURY TRIAL DEMANDED

Plaintiff hereby demands a trial by jury.

Dated: March 18, 2020 THE ROSEN LAW FIRM, P.A

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